

9/2

|                               |                        |                     |  |
|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 09/627,375             | SU, HUAN-YU         |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Qi Han                 | 2654                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the amendment dated 7/22/2004.
2.  The allowed claim(s) is/are 1-3,7 and 28-30.
3.  The drawings filed on 28 July 2000 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## DETAILED ACTION

### *Response to Amendment*

1. This communication is responsive to the applicant's amendment dated 07/22/2004. Applicant amended claims 1, 28 and 30, canceled claims 9-11 and 35-37, and added claims 38-39 (see page 2-4 of the amendment).

### *Examiner's Amendment*

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in telephone interviews with applicant's representative, Farshad Farjami on 10/20/2004 and 10/22/2004. The Examiner's Amendment is as following:

#### **In the claims:**

**Claim 1, see the amendment dated 07/22/2004**, page 2, line 2 of the claim, after "a plurality of output rates", insert -- and a plurality of service classes--;

line 17 of the claim, after "the service demand is determined based on", delete "at";

the last line of the claim, after "service class of the one user", insert --and wherein relative percentages of the plurality of output rates are adjusted to achieve the average output rate that is approximately equal to the target average data rate-- .

Art Unit: 2654

**Claim 3**, page 3, line 2 of the claim, replace “a plurality” with --the plurality--.

**Claim 28**, page 3, line 2 of the claim, after “a plurality of output rates”, insert -- and a plurality of service classes--;

page 4, line 15 of the claim (the second line of page 4), after “of the plurality of users”, replace “:” with --;-- ;

page 4, the last line of the claim (the fifth line of page 4), after “based on”, delete “at”;

page 4, the last line of the claim, after “service class of the one user”, insert --; and adjusting relative percentages of the plurality of output rates to achieve the average output rate that is approximately equal to the target average data rate--.

**Claim 30**, page 4, line 2 of the claim, replace “a plurality” with --the plurality--.

**Claims 38-39** are cancelled (because they are combined into claims 1 and 28 respectively, see above).

-----**End of Examiner’s Amendment**-----

*Allowable Subject Matter*

3. Claims 1-3, 7 and 28-30 are allowed. The following is an examiner’s statement of reasons for allowance:

Regarding independent **claims 1 and 28**, the instant application is directed to an apparatus and method for use by a flexible variable rate vocoder in a network to process signals.

The independent claims identify the uniquely distinct features of:

selecting a target average data rate based on at least one network parameter that is indicative of an available network capacity and at least one external parameter;

selecting between the plurality of output rates for coding outgoing frames of the signals to achieve an average output rate for the outgoing frames, as determined over a predetermined time period, wherein the average output rate is approximately equal to the target average data rate;

wherein the plurality of service classes comprise a premium class, a standard class and an economy class; and wherein the network has a plurality of users, each user of the plurality of users having a desired service class from the plurality of service classes, and wherein the method further comprising: determining that the network cannot accommodate a service demand by one of the plurality of users; and reducing the target average data rates associated with the standard class and the economy class to accommodate the service demand; and maintaining the target average data rate associated with the premium class, wherein the service demand is determined based on at the desired service class of the one user; and adjusting relative percentages of the plurality of output rates to achieve the average output rate that is approximately equal to the target average data rate.

The closest prior art, Smolik et al. (US 6,501,736), Bender et al. (US 6,002,933), Tiedemann Jr. et al. (US 6,335,922), neither singly nor in combination, specifically disclose nor fairly suggest the above limitation(s).

The prior art of record provided numerous teachings of alternative methods and techniques used in wireless communication system, including variable rate vocoder, multiple service levels (classes) corresponding to quality of service, and flexible transmission rate

Art Unit: 2654

adjustment based on the network capacity. However, the features presented above are not anticipated by, nor made obvious over the prior art of the record.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

5. Any response to this action should be mailed to:  
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450  
**or faxed to:**  
(703) 872-9306, (for formal communications intended for entry)  
**Or:**  
(703) 872-9306, (for informal or draft communications, and please label "PROPOSED" or "DRAFT")

Patent Correspondence delivered by hand or delivery services, other than the USPS, should be addressed as follows and brought to U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA, 22202

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-6954.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: [ebc@uspto.gov](mailto:ebc@uspto.gov). For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh  
October 20, 2004

  
**RICHEMOND DORVIL**  
SUPERVISORY PATENT EXAMINER